

1646

## RAW SEQUENCE LISTING

DATE: 01/11/2001

PATENT APPLICATION: US/09/029,042C

TIME: 11:19:26

Input Set : N:\paola\PTO.txt

Output Set: N:\CRF3\01112001\I029042C.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: Kim, Sun-Young  
 5 Kim, Kee-Won  
 6 Kim, Tae-Han  
 7 Hwang, Jeong-Ho  
 8 Kim, Seon-Hee  
 9 Lee, Sun-Young  
 11 <120> TITLE OF INVENTION: Heterologous Protein Production System using Avian Cells  
 OK 0 <130> FILE REFERENCE:  
 13 <140> CURRENT APPLICATION NUMBER: US 09/029,042C  
 15 <141> CURRENT FILING DATE: 1998-05-15  
 17 <150> PRIOR APPLICATION NUMBER: PCT/KR96/00145  
 19 <151> PRIOR FILING DATE: 1996-08-23  
 21 <160> NUMBER OF SEQ ID NOS: 11

## ERRORED SEQUENCES

68 <210> SEQ ID NO: 2  
 70 <211> LENGTH: 1583  
 72 <212> TYPE: DNA  
 74 <213> ORGANISM: erythropoietin  
 76 <400> SEQUENCE: 2  
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 80 gtgacagccg agtcctggag agtacctct tggagggcaa ggagggccag 150  
 81 aatatacagc tgagacccct tcccagcac attccacaga actcacgctc 200  
 82 agggcttcag ggaactctcc ccagatccag gaacctggca ctgggtttgg 250  
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 84 tggccccaaa ccatacctlg aaactaggca agyagcaaa ccagcagatc 350  
 85 ctacgcctgt gcccagggcc agagccttca gggaccttg actccccggg 400  
 86 ctgtgtgcat ttcagacggg ctgtgtgaa cactgcagct lgaatgagaa 450  
 87 tateactgtc ccagacacca aagttaatct ctatgcctgg aagaggatgg 500  
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 89 gcgaacctga ttttgaiga aaggagaaat gatcgaggga aaggtaaaa 600  
 90 ggagcagcag agatgaggtt gcttgggcgc agaggctcac gtctataatc 650  
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 92 gaccaacctd ggcagcatag tgagatcccc catctctaca aacatttaaa 750  
 93 aaaatttagc aggtgaagt gtgcatgggt gtaglcccg atatttggaa 800  
 94 ggttgaggcc ggaggatcgc ttgagcccg gaatttgagg ctgcagttag 850  
 95 ctgtgatcac accactgcac tccagctcca gtgacagat gaggccclgt 900  
 96 ctcaaaaaag aaaaagaaaa agaaaaataa tgagggtctg atggaalacg 950  
 97 ttcattatlc attactcac tcaactcact attcattcat lcatlcatlc 1000  
 98 aacatgtctt attgcatacc ttctgtttgc tcaagcttgg gcttgagagt 1050  
 99 ccactcctct taggtcgggc agcaggccgt agaagttctg cagggccttg 1100  
 100 ccttctgtgc ggaagcttgc ctgcccggcc aggccctglt ggtcaactct 1150  
 101 tcccagccgt gggagccctt gaagctgcat gtgataaaag ccgtcagttg 1200  
 102 ccttcgcagc ctcaccactc tgcctcgggc tctgggagcc caggtgagta 1250

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103  ggagcgggaca cttctgcttg cccctttctgt aagaagggga gaaggggtctt 1300
104  gctaaggagt acaggaactg tccgtattcc tccctttctt gtggcactgc 1350
105  agcgcctccc tcttttctcc ttggcagaaq gaagccatct cccctccaga 1400
106  tgcggcctcc gctgctccac tccgaacaat cactgctgac actttccgca 1450
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251 <212> TYPE: DNA
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259  gtagacagccg aqtcctggag aggtacctct tggaggccaa ggaaggcag 150
260  aatatacagg tgaagacctc tcccagcac attccacaga actcacgctc 200
261  aaggtcttcag gqgaactcct cccagcatcc aggaacctgg cacttggctt 250
262  ggggtggagt tgggaaagcta gacactgccc cctacataaa gaataagctc 300
263  ggtggcccca aaccatacct ggaacttag caaggagcaa agccagcaga 350
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265  cgggctctgt acatccaga cgggctgtgc tgaacactgc agcttgaatg 450
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267  atggaggtga gtctcttttl ttttttttl cctttcttll ggagaacttc 550
268  atttgcagag ctgattttgg atgaaaggga aatgatcga gggaaaggta 600
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270  aatccagagg tgaagtggcc gagatgggag aattgcttga gccctggaq 700
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272  taaaaaaatt agtcaaggtg agtgggtgat ggtggtagtc ccagatattl 800
273  ggaaggtctg ggcgggagga tgccttgagc ccaggaattl gaggtgcag 850
274  tgagctgtga tccaccact gcactccagc ctcaagtaca gaggtaggac 900
275  ctgtctccaa aaagaaaaga aaaaagaaaa attatgaggg ctgtatggaa 950
276  tcaattcatt attcattcac tcactcacic actcattcac tcaattcatt 1000
277  attcaacaag tcttattgca taccttctgt ttgctcact tgggtgcttg 1050
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279  ggttccactc cctgtaggtc gggcagcagg ccgtagaagt ctggcagggc 1150
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286  cagatcggc ctcagctgct ccactccgaa caatcactgc tgacatttc 1500
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409 <211> LENGTH: 193
411 <212> TYPE: PRT
413 <213> ORGANISM: erythropoietin gene
415 <400> SEQUENCE: 10
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do not use "i" in the  
sequence itself;  
use "n" and explain in  
C2207-C2237 section

next page

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Input Set : N:\paola\PTO.txt  
Output Set: N:\CRF3\01112001\I029042C.raw

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418      1      5      10      15
419  Leu Ser Leu Pro Leu Gly Leu Pro Val Leu Gly Ala Pro Pro Arg Leu
420      20      25      30
421  Ile Cys Asp Arg Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu
422      35      40      45
423  Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu
424      50      55      60
425  Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp Lys Arg
426      65      70      75      80
427  Met Glu Val Gly Gln Ala Val Glu Val Trp Gln Gly Leu Ala Leu
428      85      90      95
429  Leu Ser Glu Ser Val Leu Arg Gly Gln Ala Leu Leu Val Asn Ser Ser
E--> 430      100      105      110      115
431  Gln Pro Trp Glu Pro Leu Glu His Val Asp Lys Ala Val Ser Gly
E--> 432      115      120      125
433  Leu Arg Ser Leu Thr Thr Leu Arg Ala Leu Gly Ala Gln Lys Glu
E--> 434      130      135      140
435  Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala Pro Leu Arg Thr Ile
E--> 436      145      150      155      160
437  Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val Tyr Ser Asn Phe Leu
E--> 438      165      170      175
439  Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala Cys Arg Thr Gly Asp
E--> 440      180      185      190
441  Arg
445 <210> SEQ ID NO: 11
447 <211> LENGTH: 193
449 <212> TYPE: PRT
451 <213> ORGANISM: erythropoietin gene
453 <400> SEQUENCE: 11
455  Met Gly Val His Glu Cys Pro Ala Trp Leu Trp Leu Leu Ser Leu
456      1      5      10      15
457  Leu Ser Leu Pro Leu Gly Leu Pro Val Leu Gly Ala Pro Pro Arg Leu
458      20      25      30
459  Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu
460      35      40      45
461  Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu
462      50      55      60
463  Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp Lys Arg
464      65      70      75      80
465  Met Glu Val Gly Gln Ala Val Glu Val Trp Gln Gly Leu Ala Leu
466      85      90      95
467  Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu Leu Val Asn Ser Ser
468      100      105      110
469  Gln Pro Trp Glu Pro Leu Glu Leu His Val Asp Lys Ala Val Ser Gly
470      115      120      125
471  Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu Gly Ala Gln Lys Glu
472      130      135      140
473  Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala Pro Leu Arg Thr Ile
474      145      150      155      160

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*misaligned  
numbers*

*next page*

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Input Set : N:\paola\PTO.txt  
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475	Thr	Ala	Asp	Thr	Phe	Arg	Lys	Leu	Phe	Arg	Val	Tyr	Ser	Asn	Phe	Leu
476					165					170					175	
477	Arg	Gly	Glu	Leu	Lys	Leu	Tyr	Thr	Gly	Glu	Ala	Cys	Arg	Thr	Gly	Asp
478					180					185					190	
479																
480																

E--> 480

*delete at end of file*

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/029,042C

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Input Set : N:\paola\PTO.txt  
Output Set: N:\CRF3\01112001\I029042C.raw

L:0 M:201 W: Mandatory field data missing, FILE REFERENCE  
L:108 M:254 E: No. of Bases conflict, LENGTH:Input:1593 Counted:1533 SEQ:2  
L:108 M:252 E: No. of Seq. differs, <211>LENGTH:Input:1583 Found:1533 SEQ:2  
L:278 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1  
L:430 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:10  
M:332 Repeated in SeqNo\*10  
L:480 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:11

## **RAW SEQUENCE LISTING ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH

TECH CENTER 1600/2901

PM 262001

CEMEL

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/029,042C

Source: 1646

Date Processed by STIC: 1/11/2001

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY.

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin30help@uspto.gov](mailto:patin30help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW.**

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**